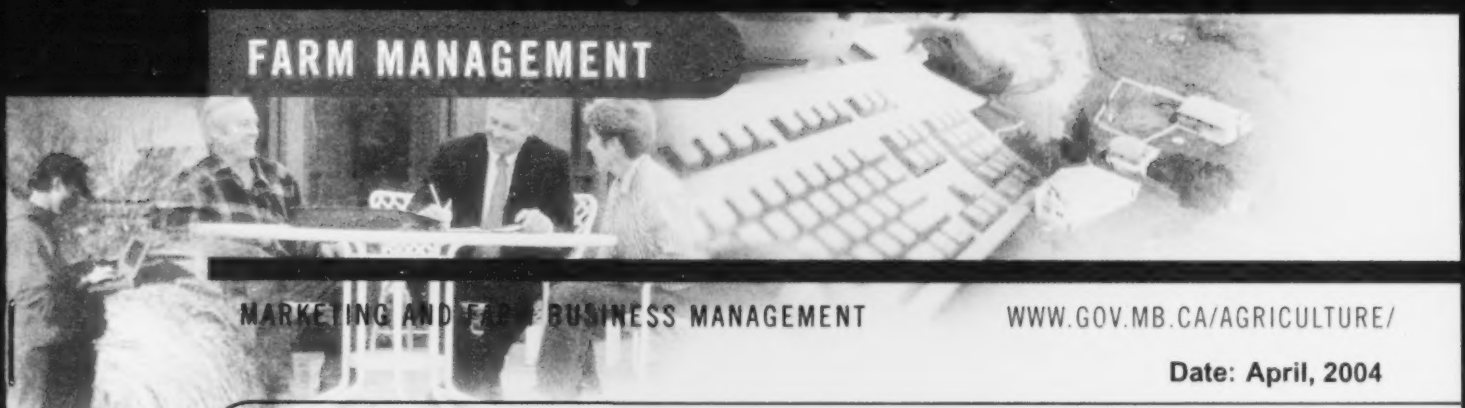

Date: April, 2004

Guidelines For Estimating

Weaner Pig (Nursery) Costs 5 - 23 kg

Based on marketing 32,592 pigs

This publication is intended to provide a format and a set of guidelines for determining the cost of production for a weaner pig 5-23 kg enterprise. This type of operation is intended to represent the second stage, or nursery, of a three stage pork system. The three production stages are as follows: first stage - farrow to 5 kg, second stage - weaner pig (nursery) 5 to 23 kg, third stage - grower/finisher 23 kg to market weight. Adjustments will be necessary when applying these figures to your enterprise.

The assumptions on which the costs are based are outlined in the supporting pages. These assumptions were arrived at using the breeding stock, management practices, and facilities seen in modern, well managed swine operations of comparable size in Manitoba. Productivity and performance assumptions are based on information collected by department specialists, feed companies and other organizations. Where individual herd productivity and performance levels differ from those listed adjustments will be required.

The guideline can be useful for comparison purposes. Comparison of costs at different levels of production can be made with other farms, the farm over a period of time or comparing the plan with the actual results at the end of the planning period.

Disclaimer: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user. If you require assistance with developing your individual budget, please contact your local Manitoba Agriculture, Food and Rural Initiatives office.

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Weaner Pig (Nursery) Costs 5-23 kg Cost of Production

The following weaner pig 5-23kg cost of production budget is **based on the assumption that all feed is purchased.**

The budget also includes a land investment cost based on the assumption that 160 acres would be required for this size of operation, with 140 acres being rented out at $25 per acre.

If developing a cost of production budget to include home mixed rations the following items should be added to the budget:

- additional equipment costs associated with a mix mill;
- additional bins for different ingredients;
- additional labour for feed preparation.

The rations illustrated in this budget are examples only. Individual farm conditions should be taken into account when formulating the diets. Producers need to know what the feed intakes of their animals are. Please consult with a nutritionist for diet formulations suggestions.

The Manitoba pork production industry profile is changing and this budget was specifically designed to address the need of producers who may want to analyze the cost of starting up or switching to a swine nursery 5-23 kg operation. Several companies are offering contracts with varying levels of guarantees. Producers need to accurately calculate their costs before they can properly make a decision.

Weaner Pig (Nursery) 5-23 kg Summary
April, 2004

	$/Pig Sold	Total Cost	Your Cost
A. Operating Costs			
1. Feed Costs:			
1.01 Pre Starter 1	$1.67	$54,429	
1.02 Pre Starter 2	$3.70	$120,590	
1.03 Starter 1	$4.30	$140,146	
1.04 Starter 2	$5.81	$189,360	
Total Feed Cost	**$15.48**	**$504,525**	
2. Other Operating Costs:			
2.01 Weanling cost	$35.75	$1,165,164	
2.02 Veterinary Medicine & Supplies	$0.43	$14,100	
2.03 Maintenance & Repairs	$0.10	$3,259	
2.04 Hydro & Propane	$2.15	$70,000	
2.05 Insurance	$0.21	$6,844	
2.06 Manure Costs	$0.40	$13,100	
2.07 Office Supplies	$0.04	$1,440	
2.08 Levy, Marketing & Transportation	$1.00	$32,592	
2.09 Property Taxes	$0.20	$6,615	
Subtotal Operating Costs	$55.77	$1,817,639	
2.10 Interest on Operating Cost	$0.39	$12,711	
Total Operating Costs	**$56.16**	**$1,830,350**	
B. Fixed Costs			
3. Depreciation:			
3.01 Buildings and Manure Storage	$0.51	$16,622	
3.02 Equipment	$0.83	$27,051	
Total Depreciation Cost	$1.34	$43,673	
4. Investment:			
4.01 Land Cost	$0.07	$2,400	
4.02 Buildings and Manure Storage	$0.24	$7,822	
4.03 Equipment	$0.20	$6,518	
Total Investment Cost	$0.51	$16,740	
Total Fixed Costs	**$1.85**	**$60,413**	
C. Labour			
Wages, benefits and hired manager	$1.53	$49,866	
Total Cost of Production	**$59.54**	**$1,940,629**	

Break-Even Price	$/Pig	
Operating Cost	$56.16	
Operating & Labour Cost	$57.69	
Operating Labour & Fixed Cost	$59.54	

Disclaimer: This budget is only a guide and is not intended as an in depth study of the cost of production of this industry. Interpretation and utilization of this information is the responsibility of the user.

Weaner Pig (Nursery) Production Costs 5-23 kg

1. This input table outlines the cost of production for the weaner barn only.
2. Buildings and equipment are valued at new cost.
3. Manure haulage is contracted out.

Herd Profile

Weaner Pig Places	**4,800**	
Number of turns	**7**	
Weaner Pigs Purchased	**33,600**	
Percent Post-Weaning Mortality	**3.0**	
Pigs Died, Post-Weaning	**1,008**	
Weaner Pigs Sold	**32,592**	
Average Market Price	**$65.00**	/cwt
Weanling Formula Factor (% of Mkt Price)	**55.00**	%
Calculated Weanling Puchase Price	$35.75	/pig

Feed Requirements	Feed period Days			Ration Cost Purchased	Ration Cost Home-Mixed	
Pre Starter 1	**6**	**1.1**	kg/pig	**$1,520.00**	$0.00	/tonne
Pre Starter 2	**10**	**2.8**	kg/pig	**$1,320.00**	$0.00	/tonne
Starter 1	**17**	**8.9**	kg/pig	**$483.00**	$0.00	/tonne
Starter 2	**18**	**15.0**	kg/pig	**$387.00**	$0.00	/tonne
Total Feed	**51**	**27.8**	kg/pig			

Weaner Pig Efficiency

Days Weaner on feed (nursery)	**51**	days
Total Cycle Days (per turn)	**52**	days
Target Starting Weight	**5.0**	kg
Target Ending Weight	**23.0**	kg
Feed Conversion Ratio (feed:gain)	**1.54**	kg
Average Daily Gain	**0.35**	kg

Labour

Total Hours per 7-day week	**80.0**	hours/week
Wage (includes benefits & hired manager)	**$12.00**	/hour

Capital Investment

	Area ft^2	Cost $/$ft^2$	$/Pig Place	Total Cost
Buildings				
Barn	14,400	**$19.00**	$57.00	$273,600
Office, Mechanical & loading	1,000	**$20.00**	$4.17	$20,000
Feed Mill (building only)			$0.00	**$0**
Total Building Cost			**$61.17**	**$293,600**
Equipment				
Nursery barn			$41.67	**$200,000**
Generator			$2.50	**$12,000**
Electrical & other			$17.71	**$85,000**
Fire Alarm System			$0.21	**$1,000**
Feed Bins			$0.83	**$4,000**
Ingredient Bins			$0.00	**$0**
Total Equipment Cost			**$62.92**	**$302,000**
Total Buildings and Equipment Cost			**$124.08**	**$595,600**
Land Value				
Land Investment	20 acres @	$500		**$10,000**
Other Costs				
Site preparation			$10.42	**$50,000**
Manure Storage			$3.75	**$18,000**
Total Other Costs			**$14.17**	**$68,000**
Total Capital Investment			**$140.33**	**$673,600**

Feed Ingredient Costs

Ingredients	Price/tonne	Your Cost
Wheat	$149	
Barley	$120	
Corn	$155	
Soybean Meal - 47 %	$465	
Canola Meal - 34%	$360	
Peas	$180	
Creep Premix	$850	
Sow Micro Premix	$3,500	
Grower Micro Premix	$2,500	
Canola Oil	$900	
Whey Powder	$800	
Herring Meal	$1,400	
Plasma	$7,500	
Limestone	$80	
Dical (16% Ca-21% P)	$455	
Salt - 96%	$100	
L-Lysine HCL	$4,500	
L-Threonine	$6,400	
D,L-Methionine	$4,500	
Oats - Steam rolled	$400	
Processing Cost (Hydro & Repairs/Maintenance & Insurance)	$3.25	
Percent Weight loss due to processing	1.25 %	
Labour	$4.00	

Feed Requirement and Cost Summary

	Amount (kg)		Price $ /tonne		Ration Cost $ /tonne	Your Cost
Pre starter 1						
Corn	106.0		$155.00		$16.43	
Soybean Meal - 47 %	120.0		$465.00		$55.80	
Sow Micro Premix	5.0		$3,500.00		$17.50	
Canola Oil	27.0		$900.00		$24.30	
Whey Powder	121.0		$800.00		$96.80	
Herring Meal	61.0		$1,400.00		$85.40	
Plasma	59.0		$7,500.00		$442.50	
Limestone	12.5		$80.00		$1.00	
Dical (16% Ca-21% P)	10.0		$455.00		$4.55	
Salt - 96%	3.5		$100.00		$0.35	
L-Lysine HCL	0.5		$4,500.00		$2.25	
Oats - Steam rolled	474.5		$400.00		$189.80	
Total Pre Starter 1	**1,000.0**	**kg**			**$936.68**	
Adjusted for weight loss (percentage)			1.25	%	$948.39	
Plus processing cost per tonne			$3.25		$951.64	
Plus Labour Cost			$4.00		**$955.64**	
Pre starter 2						
Corn	134.5		$155.00		$20.85	
Soybean Meal - 47 %	130.0		$465.00		$60.45	
Sow Micro Premix	5.0		$3,500.00		$17.50	
Canola Oil	19.0		$900.00		$17.10	
Whey Powder	125.0		$800.00		$100.00	
Herring Meal	75.0		$1,400.00		$105.00	
Limestone	12.5		$80.00		$1.00	
Dical (16% Ca-21% P)	10.0		$455.00		$4.55	
Salt - 96%	3.5		$100.00		$0.35	
L-Lysine HCL	0.5		$4,500.00		$2.25	
Oats - Steam rolled	485.0		$400.00		$194.00	
Total Pre Starter 2	**1,000.0**	**kg**			**$523.05**	
Adjusted for weight loss (percentage)			1.25	%	$529.59	
Plus processing cost per tonne			$3.25		$532.84	
Plus Labour Cost			$4.00		**$536.84**	

Starter 1

Corn	616.0	$155.00	$95.48	
Soybean Meal - 47 %	204.5	$465.00	$95.09	
Sow Micro Premix	5.0	$3,500.00	$17.50	
Canola Oil	11.3	$900.00	$10.17	
Whey Powder	90.7	$800.00	$72.56	
Herring Meal	45.5	$1,400.00	$63.70	
Limestone	12.5	$80.00	$1.00	
Dical (16% Ca-21% P)	10.0	$455.00	$4.55	
Salt - 96%	3.5	$100.00	$0.35	
L-Lysine HCL	1.0	$4,500.00	$4.50	
Total Starter 1	**1,000.0 kg**		**$364.90**	
Adjusted for weight loss (percentage)		1.25 %	$369.46	
Plus processing cost per tonne		$3.25	$372.71	
Plus Labour Cost		$4.00	**$376.71**	

Starter 2

Barley	186.0	$120.00	$22.32	
Corn	555.0	$155.00	$86.03	
Soybean Meal - 47 %	226.6	$465.00	$105.37	
Sow Micro Premix	5.0	$3,500.00	$17.50	
Limestone	12.5	$80.00	$1.00	
Dical (16% Ca-21% P)	10.0	$455.00	$4.55	
Salt - 96%	3.5	$100.00	$0.35	
L-Lysine HCL	1.4	$4,500.00	$6.30	
Total Starter 2	**1,000.0 kg**		**$243.42**	
Adjusted for weight loss (percentage)		1.25 %	$246.46	
Plus processing cost per tonne		$3.25	$249.71	
Plus Labour Cost		$4.00	**$253.71**	

Weaner Pig (Nursery) 5-23kg Production Costs Worksheet

A. Operating Costs

1. Feed Requirements and Costs

			Your Cost
1.01 Pre starter 1			
	1.10	kg ration/pig	
x	$1,520.00	/tonne	
÷	1,000	kg/tonne	
=	**$1.67**	**/pig sold**	
1.02 Pre starter 2			
	2.8	kg ration/pig	
x	$1,320.00	/tonne	
÷	1,000	kg/tonne	
=	**$3.70**	**/pig sold**	
1.03 Starter 1			
	8.9	kg ration/pig	
x	$483.00	/tonne	
÷	1,000	kg/tonne	
=	**$4.30**	**/pig sold**	
1.04 Starter 2			
	15.0	kg ration/pig	
x	$387.00	/tonne	
÷	1,000	kg/tonne	
=	**$5.81**	**/pig sold**	

2. Other Operating Costs

2.01 Weanling Purchase			
	$65.00	$/cwt average market price	
x	55.00	% of mkt price weanling formula factor	
	$35.75	**purchase cost**	
2.02 Veterinary Medicine & Supplies			
	$3,600	professional services	
+	$10,500	medication	
÷	32,592	pigs sold	
=	**$0.43**	**/pig sold**	

2.03 Maintenance & Repairs

	$595,600	building & equipment cost
x	0.55	% year repair & maintenance
÷	32,592	pigs sold
=	**$0.10**	**/pig sold**

2.04 Hydro & Propane

	$30,000	hydro
+	$40,000	propane
÷	32,592	pigs sold
=	**$2.15**	**/pig sold**

2.05 Insurance

	$595,600	investment
x	$0.65	rate/$100
÷	100	/$100 capital
÷	32,592	pigs sold
=	$0.12	/pig sold

	$264,000	market hogs value
x	$0.65	/$100 capital invested
÷	32,592	pigs sold
=	$0.05	/pig sold

	$45.00	business interruption coverage/feeder
x	4,800	feeders
x	$0.65	/$100 capital invested
÷	32,592	pigs sold
=	$0.04	/pig sold

Total	=	**$0.21**	**/pig sold**

2.06 Manure Costs

Haulage	2.4	litres/pig/day
x	365	days
x	$0.002	/litre
x	4,800	pig places
÷	32,592	pigs sold
=	$0.27	/pig sold

Odour control

	$4,300	total cost
÷	32,592	pigs sold
=	$0.13	/pig sold
Total =	**$0.40**	**/pig sold**

2.07 Office Supplies

	$0.30	/pig place
x	$4,800	pig places
÷	32,592	pigs sold
=	$0.04	**/pig sold**

2.08 Levy, Marketing & Transportation

$1.00 /pig sold

2.09 Property Taxes

	$6,615	total taxes
÷	32,592	pigs sold
=	**$0.20**	**/pig sold**

2.10 Interest on Operating Cost:

	$35.75	weaner cost
+	$20.02	subtotal operating
÷	2	average
x	52	days per turn
÷	365	days per year
x	6.0	% operating interest
=	**$0.39**	**/pig sold**

B. Fixed Costs

3. Depreciation: $\frac{\text{Original cost - Salvage Value}}{\text{Useful Life}}$

3.01 Buildings

	$361,600	building cost (including manure storage)	
-	$29,360	salvage value (building only)	
÷	20	years useful life	
÷	32,592	pigs sold	
=	**$0.51**	**/pig sold**	

3.02 Equipment

	$302,000	equipment cost	
-	$30,200	salvage value	
÷	10	years useful life	
÷	32,592	pigs sold	
=	**$0.83**	**/pig sold**	

4. Investment: $\frac{\text{Original Cost + Salvage Value}}{2}$ x Investment Rate

4.01 Land

	$10,000	land value	
+	$50,000	site preparation	
x	4.0	% investment rate	
÷	32,592	pigs sold	
=	**$0.07**	**/pig sold**	

4.02 Buildings

	$361,600	building cost (including manure storage)	
+	$29,360	salvage value (building only)	
÷	2	average	
x	4.0	% investment rate	
÷	32,592	pigs sold	
=	**$0.24**	**/pig sold**	

4.03 Equipment

	$302,000	equipment cost	
+	$30,200	salvage value	
÷	2	average	
x	4.0	% investment rate	
÷	32,592	pigs sold	
=	**$0.20**	**/pig sold**	

C. Labour

	80.0	hours/week	
x	52	weeks/year	
x	$12.00	/hour	
÷	32,592	pigs sold	
=	**$1.53**	**/pig sold**	

Summary of Home Mixed Feed Ingredients Used

Total pigs sold **32,592**

	Total per Year (tonnes)	Total per Month (tonnes)	Total per Pig (kgs)	Total per Pig (lbs)
Wheat	0.0	0.00	0.0	0.0
Barley	0.0	0.00	0.0	0.0
Corn	0.0	0.00	0.0	0.0
Soybean Meal - 47 %	0.0	0.00	0.0	0.0
Canola Meal - 34%	0.0	0.00	0.0	0.0
Peas	0.0	0.00	0.0	0.0
Creep Premix	0.0	0.00	0.0	0.0
Sow Micro Premix	0.0	0.00	0.0	0.0
Grower Micro Premix	0.0	0.00	0.0	0.0
Canola Oil	0.0	0.00	0.0	0.0
Whey Powder	0.0	0.00	0.0	0.0
Herring Meal	0.0	0.00	0.0	0.0
Plasma	0.0	0.00	0.0	0.0
Limestone	0.0	0.00	0.0	0.0
Dical (16% Ca-21% P)	0.0	0.00	0.0	0.0
Salt - 96%	0.0	0.00	0.0	0.0
L-Lysine HCL	0.0	0.00	0.0	0.0
L-Threonine	0.0	0.00	0.0	0.0
D,L-Methionine	0.0	0.00	0.0	0.0
Oats - Steam rolled	0.0	0.00	0.0	0.0
Total	**0.0**	**0.0**	**0.0**	**0.0**

Summary of Purchased Feed Ingredients Used

	Total per Pig Mkt (kgs)	Total per Year (tonnes)	Total per Month (tonnes)	Total per Pig Mkt (lbs)
Pre starter 1	1.1	37.0	3.1	2.4
Pre starter 2	2.8	94.1	7.8	6.2
Starter 1	8.9	299.0	24.9	19.6
Starter 2	15.0	504.0	42.0	33.1
Total	**27.8**	**934.1**	**77.8**	**61.3**
Total	**27.8**	**934.1**	**77.8**	**61.3**

For further information contact your local Manitoba Agriculture, Food and Rural Initiatives office.

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